Lesson Plan

The Olive oil and the olive tree

School: IC "Libero Andreotti"	**Teacher:** Stefania Porciani
Title : The Olive oil and the olive tree	**Time :** about 40 days- from the end of February to half April
Subject : *Italian , ICT, Science, Art*	
Aim: -Knowing the life cycle of the olive tree and its characteristics by promoting correct information on the production aspects and nutritional qualities of the oil; -Develop attitudes of curiosity and ways of looking at the world around us (observation nursery behind the school); - Exploring phenomena with a scientific approach (observation during the visit, asking questions, making assumptions and verify them); -Identifying the cycles of nature (recognise the transformation of natural resources and products seed, plant, oil); -identify links and relationships.	
Key CS elements: decomposition, pattern recognition, abstraction, practicing algorithms	
Age group : 8 - 9 year olds	
Learning situations: class, art room, computer lab, school garden and olive farm.	**Activity type :** laboratory activity, brainstorming, cooperative learning
Resources : laptop, white board, textbooks, sheets of paper, printer; teachers (3 in classroom), farm owner and a specialized nurseryman.	

Learning development:

1.DECOMPOSITION (breaking a problem down into a smaller part)

After the visit at the olive tree farm the students will:

- Discover the different way to create a new olive tree plant and its productive cycle;
- Recognize characteristics of the olive tree from its trunk, crown, leaves, fruits;
- Observe the working steps to obtain the oil from the olives;

- find out how the oil produced is used and taste it.

2. PATTERN RECOGNITION (looking for similarity and trend within a problem)
the students will learn:
-as from a sprout can grow a huge tree;
- each plant has its own fruit;
- from the plants fruits transformed you can have a final product;
- how to taste olive oil.

3 .ABSTRACTION (focusing on the important part of a problem, filtering out unnecessary details)
the students will:
- Product an informative text on olive tree plants;
- Search on PC the five phases of oil transformation;
- Print and crop images;
- Draw and cut the olive leaves;
- Coloring and reviewing drawings and writings;
- Create olives with das.

4. ALGORITHM DESIGN (create a step by step sequence of instruction to solve the problem)
the students will :
- Visit the olive farm;
- Take photo of what they see;
- Reviewed the photos that documented the various moments of the visit;
- Discussed again through a CIRCLE TIME;
- Product an informative text;
- Search on PC the five phases of oil transformation;
- Print and crop images;
- Draw and cut the olive leaves;
- Coloring and reviewing drawings and writings;
- Create olives with das.
- taste the olive oil;

Assessment:

The assessment of learning can take place through the new students acquisitions keeping in mind the levels of departure;

- Commitment;
- Participation;
- The improvement of concentration;
- The improvement of language;
- The ability to cooperate and improve social skills.

Expected results:

- Children will learn scientific knowledge through hands-on experience;,
- they will open the mind to planning, learning that we do not only learn about texts, but that the path to a knowledge is long and has various facets;
- They will expand knowledge of the territory around them;
- They will have ideas and moments to socialize, collaborate in respect of the other.

Notes:

The project was born from having discovered in the immediate vicinity of the school, the farm "Giusti Nicola", specialized in the cultivation of olive trees. This plant, a beautiful and ancient tree, has become the main protagonist of the economy of our territory, both for the production of new plants in the many nurseries, both for the production of excellent oil. The curiosity of children, the desire to explore and know, pushed me to make the territory a "great open book"

Attachment: mind map